

**To:** Albright, David[Albright.David@epa.gov]; Montgomery, Michael[Montgomery.Michael@epa.gov]; Dermer, Michele[Dermer.Michele@epa.gov]; Diamond, Jane[Diamond.Jane@epa.gov]  
**From:** Rao, Kate  
**Sent:** Wed 2/11/2015 1:03:05 AM  
**Subject:** Fwd: California Water Safety Plan Sent to E.P.A.

Greenwire article.

Kate Rao  
USEPA Region 9  
Water Division  
415-972-3533

Begin forwarded message:

**From:** "Skadowski, Suzanne" <Skadowski.Suzanne@epa.gov>  
**Date:** February 10, 2015 at 4:47:06 PM PST  
**To:** "Zito, Kelly" <ZITO.KELLY@EPA.GOV>, "Mogharabi, Nahal" <MOGHARABI.NAHAL@EPA.GOV>  
**Cc:** "Keener, Bill" <Keener.Bill@epa.gov>, "Rao, Kate" <Rao.kate@epa.gov>  
**Subject:** RE: California Water Safety Plan Sent to E.P.A.

Greenwire <http://www.eenews.net/greenwire/2015/02/10/stories/1060013179>

## **OIL AND GAS: Calif. shuts down wastewater injection at drinkable aquifers**

Published: Tuesday, February 10, 2015

California regulators have ordered oil companies to stop injecting wastewater into potentially drinkable aquifers by Oct. 15.

The state's Division of Oil, Gas and Geothermal Resources said in a plan submitted to U.S. EPA that it will review drinking water wells at risk of contamination and ensure that ongoing wastewater injection does not contaminate drinking water supplies.

California allowed such deposits for decades even though the federal government wanted the water protected (*Greenwire*, Feb. 6). Some analysts think that could be a problem because the state is experiencing a severe drought and may need as many sources of water as possible.

Records show that the state allowed at least 171 injection wells at aquifers that could have supplied crops or residents. Of those, 140 are still in use. Another 253 wells at lower-quality aquifers will

need to be shut off by Feb. 15, 2017.

The order will bar the wells unless they receive special permission from EPA under the Safe Drinking Water Act (David Baker, *[San Francisco Chronicle](#)*, Feb. 9). -- **SP**

**From:** Skadowski, Suzanne  
**Sent:** Tuesday, February 10, 2015 9:36 AM  
**To:** Zito, Kelly **Cc:** Keener, Bill; Rao, Kate; Mogharabi, Nahal  
**Subject:** NY Times: California Water Safety Plan Sent to E.P.A.

DOGGR's announcement was also covered on KQED last night, Fresno Bee, the San Francisco Chronicle, and Sputnik News, among others. Still haven't seen the LA Times story.

NBC Bay Area still wants to schedule a 30-min. on-camera interview with Jared, now in early March to get his reaction to the state's plan. We should discuss after the program briefs Jared.

NY Times picked up AP story: [California: Water Safety Plan Sent to E.P.A.](#)

Fresno Bee [California pledges to protect underground water from oil, gas operations](#)

Sputnik News: [CA Reviewing Oil Wells as EPA Cracks Down on "Mismanaged" Program](#)  
NBC Bay Area: [California Proposes Changes in Protecting Underground Water](#)

San Francisco Chronicle: [State pledges to stop oil firms from tainting aquifers](#)

Oil companies in California must stop injecting wastewater from their operations into potentially drinkable aquifers by Oct. 15, according to a plan by state regulators who allowed it to happen for years. In a proposal submitted to the federal Environmental Protection Agency, regulators promised to painstakingly review wells at risk of contamination, ensuring the injections did not taint aquifers already used for drinking water or irrigation in the drought-plagued Central Valley. The plan — from California's Division of Oil, Gas and Geothermal Resources — comes in response to revelations that, for decades, the division granted oil companies permits to inject leftover water from their operations into aquifers that the federal government wanted protected. Now, with California heading into a fourth year of drought, that water may be difficult for humans to use. A Chronicle analysis found that the state allowed oil companies to drill 171 wastewater injection wells into aquifers that could have been tapped for crops or people. Of those wells, 140 are still in use, according to the division. Injection into those wells must stop by mid-October unless specifically approved by the EPA, according to the plan.

## **February deadline**

An additional 253 wells breached lower-quality aquifers still considered off-limits by the EPA, from which water could have been used with more extensive treatment. Oil companies must cease using these wells by Feb. 15, 2017, barring an exemption from the EPA. The EPA, which helped uncover the practice in 2011, had given the division until Feb. 6 to submit plans for fixing the problem. The EPA has threatened to seize control of regulating the oil industry's underground injection wells in California if the state doesn't do a better job protecting groundwater supplies from contamination. (Although the division's plan is dated Feb. 6, it was released to the public on Monday.)

"Our goal is to make sure the state is up to the job," said Jared Blumenfeld, regional administrator for the EPA, in an interview before the division submitted its plans. "Frankly, if it got to the level where we needed to take (control) back, we would. That's never been off the table. But I think we're fairly far from needing to do that."

The time frame for reform has already drawn fire from environmentalists. But both state and federal regulators say the oil industry will need time to comply. If the division is forced to shut down some wells to protect drinking water supplies, the oil companies will have time to find other ways to deal with the waste.

"This is a problem that we worked ourselves into over 30 years, and it's not a problem that can be solved in a year," said the division's new supervisor, Steven Bohlen, appointed by Gov. Jerry Brown last year.

## **Problem's roots**

The problem dates to 1983, when the EPA gave the division authority to enforce the federal Safe Drinking Water Act in California's oil fields. The state's oil reservoirs typically contain large amounts of briny water mixed with the crude. Companies must separate the oil from the water and get rid of the water, which is usually too laden with minerals and hydrocarbons to be used for drinking and irrigation. In addition, oil-extraction techniques such as hydraulic fracturing use freshwater that becomes tainted in the process and needs disposal. Companies inject much of the leftover water back into oil reservoirs. But some of it is pumped into salty underground aquifers that have no oil.

The 1983 agreement listed by name aquifers that the oil industry would be able to use with a simple permit from the division. But in a bizarre snafu, there were two signed versions of the agreement, one of which listed 11 aquifers not found on the other. The division started issuing permits for injection wells drilled into those aquifers, even though they didn't previously contain oil and weren't viewed by the EPA as suitable for wastewater disposal. Under the agreement, the EPA has final say on which aquifers the oil industry can and can't use. The state even authorized oil companies to inject into a handful of aquifers already in use for drinking and irrigation, leading to the emergency closure of eight injection wells last year. Officials have now tested nine nearby drinking wells for contamination and found none. But aquifers tainted with chemicals are difficult and expensive to clean, and state water regulators say they can't be certain that contamination won't eventually turn up in those drinking water supplies.

## **Onus on oil firms**

In the future, oil companies will need to build a case for why specific aquifers should be considered suitable for wastewater disposal, according to the division's proposal. The companies will submit their data to the division and the State Water Resources Control Board for review. If those two state agencies agree, they will — together — ask the EPA to allow injections into those aquifers. As for the 11 aquifers compromised by the 1983 bureaucratic mix-up, injections there will be phased out by mid-February 2017, unless the EPA decides to let them continue.

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**From:** Rao, Kate

**Sent:** Tuesday, February 10, 2015 8:36 AM

**To:** Albright, David; Moffatt, Brett; Engelman, Alexa; Dermer, Michele; Skadowski, Suzanne; Mogharabi, Nahal; Montgomery, Michael; Diamond, Jane

**Subject:** NY Times: California: Water Safety Plan Sent to E.P.A.

NY Times picked up the AP story.

[http://www.nytimes.com/2015/02/10/us/california-water-safety-plan-sent-to-epa.html?\\_r=0](http://www.nytimes.com/2015/02/10/us/california-water-safety-plan-sent-to-epa.html?_r=0)

## California: Water Safety Plan Sent to E.P.A.

By THE ASSOCIATED PRESS FEB. 9, 2015

The state is proposing broad changes in the way it protects underground water from oil and gas operations, after finding 2,500 instances in which the state authorized such operations in protected water aquifers. State oil and gas regulators on Monday released a plan they sent the federal [Environmental Protection Agency](#) last week for bringing the state back into compliance with federal safe-drinking water requirements. A state and federal review has determined California has repeatedly authorized oil-industry injection into aquifers that were supposed to be protected as current or potential sources of water for drinking and watering crops and livestock. Steve Bohlen, head of the State Department of Conservation's oil and gas division, said 140 of 2,553 injection wells were of primary concern to the state now, because they were actively injecting oil-field fluids into aquifers with especially designated good water quality.

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